

A decorative graphic consisting of several overlapping, wavy lines in shades of blue and grey, flowing from the left side of the page towards the right. The lines have a soft, ethereal quality with some transparency.

AMARRA 2.1.1 User Manual

Thank you!

Thank you for purchasing the Amarra MINI Computer Music Player. You are about to enjoy the ultrafidelity sound of Amarra. Designed to work with your Apple™ Macintosh Computer and with iTunes, Amarra MINI provides a seamless integration for high resolution music playback.

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AMARRA MINI 2.1.1 User Manual December 2010

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The Amarra MINI installer will install the following items on to your Macintosh Computer:

- Amarra MINI 2.1 Computer Music Player
- Amarra MINI iTunes Plugin
- Amarra MINI FLAC components
- PACE iLok extension
- Amarra MINI Documentation

2. Minimum System Requirements:

Computer:

- Intel based Mac with 10.5.x, or 10.6.x
NOTE: G5/PPC supported for uncompressed files only
- RAM: 3 GB RAM minimum, 4 GB or more preferred
- USB port for iLOK security key (if using an iLok)

Peripheral FireWire Adaptors supported:

- OHCI compliant PCCard, PCI card, ExpressCard or PCIe card

Software:

- Mac OS X 10.5.x or 10.6.x and above recommended
NOTE: 10.4.X supported for uncompressed files only
- AMARRA MINI
- iTunes

We recommend a fresh install of the operating system on a clean disc. This can prevent problems later on.

We also highly recommend that your computer be used exclusively for music playback. Email, web browsers, screen sharing and other applications can all affect performance.

Note that USB hubs, audio or optical disc peripherals are generally not supported.

3. Authorizing Amarra MINI

Amarra MINI is protected with PACE's Anti-Piracy InterLok copy protection. Authorization is done using an iLok smart key or through an Interlok License File. Please read the appropriate section for more information.

3.1 Authorizing Amarra MINI using an iLok Smart Key

Your iLok should come ready to use and you should only need to install the iLOK extension on your computer. There may be occasions when you need to setup an iLOK for new options or for replacement. Please ask your dealer for more information.

PACE InterLok (iLok):
(Yours may be a different color)



NOTE: Protect your iLok! This is really your Amarra MINI product and if lost or stolen, can not be replaced without purchasing another Amarra MINI license.

PACE offers a warranty for replacing lost or stolen iLoks called 'Zero Downtime'. This program enables iLok owners to immediately replace licenses in case an iLok is broken, lost or stolen. Benefits of covering an iLok include:

- Immediate replacement of licenses in the event of disaster
- Priority support during replacement event
- Peace of mind

Contact your dealer, Sonic Studio, or log in to your iLok account for more information on Zero Downtime.

Replacement / New iLOK:

If your iLok is new and needs to be authorized. Please request authorization from Sonic Studio for your iLok USB Smart Key, visit:

<http://www.sonicstudio.com/register>

Completing the form will generate an authorization request. We will then place a license for Amarra MINI in your iLok account. Please fill out the form completely to avoid delay in authorization.

3.2 Authorizing Amarra MINI using a License File

The process begins with running Amarra MINI and generating an Interlok License Request file. This is sent to Sonic Studio and an Interlok License File (.ilf) is returned. The Interlok License File is then installed on your computer.

NOTE: Interlok License Files are Locked to a single computer. A License File can not be transferred.

1. Run Amarra MINI



Select Authorize.

4.0 Installing Amarra MINI

2. If you have an iLok you can license the software by selecting the check box.

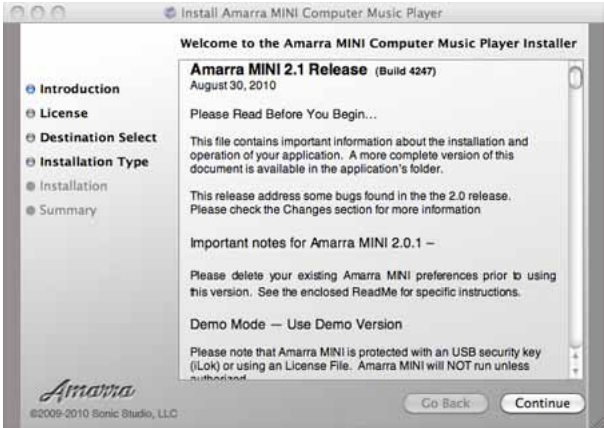


- Generate and Save the License Request File.
- Choose the "Save License Request" button.
- Specify a folder and save the file.



After Saving the License Request File send it to support@sonicstudio.com. You will receive a reply from Sonic Studio with your Interlok License File - Please keep this Safe!!

- Install the License File
 - Run Amarra MINI when you receive your License File from Sonic Studio
 - Choose "Read License" and select the Amarra_MINI_2.1_ilf file you receive and choose Next and you will see the finish dialog.
- Success! Select the Finish button to complete authorization.



Select Continue.

- Amarra MINI application is installed into the Applications folder.
It is installed here: ~/Applications/Amarra MINI 2.1
- The Amarra iTunes Plugin facilitates the interaction between Amarra and iTunes. It is installed here: ~/Library/iTunes/iTunes Plug-ins/
- The iLok Extensions are required to use the iLok USB Security key.
The iLok extension is installed on your boot volume.
- Amarra MINI installs the FLAC components required for FLAC files.
They are installed here: ~/Library/Components/



Click Install.
(Software will be installed.)



Select the *Close* button to quit the AMARRA MINI installer.

4.1 Uninstalling Amarra MINI

To uninstall Amarra MINI and remove all files please run the “**Uninstall Amarra MINI.app**”. This will remove the application, iTunes plug-in, FLAC component, and PACE extensions. You may be prompted for your password.

5. Launching and Using Amarra MINI

Open the Applications folder on your Mac, locate the AMARRA MINI folder. This folder contains the AMARRA MINI application as well as documentation and an Extras folder.



tion.



NOTE:

Double clicking on the Amarra MINI icon launches Amarra MINI and iTunes.

6.0. Amarra MINI Interface Module

1. Amarra/iTunes Indicator

Indicates playback status:

Blue = Amarra is playing

Orange = iTunes is playing

2. Amarra EQ

Fine tune your sound with the high quality Amarra EQ.

3. Memory Playback

This enables Memory Loading for playback.

The Memory Used is displayed to the left of the Time Display.



4. Playlist Button

The Playlist Window is where tracks can be loaded and played.

5. Tracks

This displays the list of tracks loaded in the current Playlist.

6. Task Bar Controls

These buttons control

- Adding Files to Playlist
- Options for playing tracks:
 - Stop At End
 - Repeat Playlist
 - Add Next Tracks
- Link for iTunes window

8. Transport Controls

The Previous Track, Play/Pause, and Next Track buttons are located here.

Tip: You can change the Hardware Sample Rate by Control Click on the Sample Rate Display.

Tip: Use the Arrow keys to adjust the volume..
Use the Option-Arrow key for fine adjustment.

6.1. Using Amarra MINI and iTunes

Amarra MINI runs alongside Apple's iTunes program. This allows you to manage and access all your music through the main iTunes Music Library or through custom iTunes Playlists.

As shown below, Amarra MINI occupies the area to the left of your iTunes window:



AMARRA MINI and iTunes.

You can use iTunes like you always have, select the songs / playlists and play. Amarra MINI follows what you do in iTunes and takes over playback whenever a full resolution uncompressed AIFF or WAV file ranging from 44.1-96 kHz sample rate (16-24 bits) is played.

Amarra MINI also supports ALAC, AAC, MP3 and most compressed formats, including FLAC. Amarra MINI can not play protected AAC files.

To create custom playlists for high resolution music, follow the Help menu instructions in iTunes.

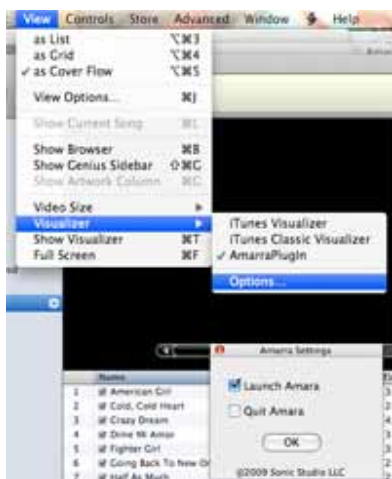


- Locate the Amarra MINI.app icon.
- Click once and hold the icon then drag to the dock.
- The Dock for your system will appear.
- Place (drop) the Amarra MINI icon and release on the dock.
- You can move its location within the Dock later.



NOTE:

When you launch iTunes, Amarra MINI will automatically launch. Likewise, when iTunes quits Amarra MINI will be shutdown. In iTunes under Visual Plugin there is an Options menu command which can be used to disable the auto launch / quit feature.



6.2. Using Playlists with Amarra MINI

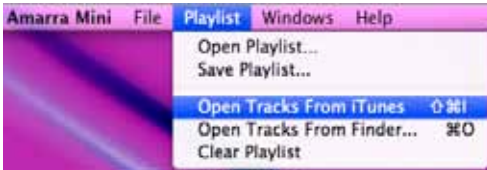
Amarra MINI allows you to load and create playlists from files in your iTunes library as well as files loaded from the Finder:

- Select the Playlist as a source by clicking on the PLAYLIST button.
- Add files using the Menu Commands or Playlist Command button
You can also Drag and Drop files from the Finder or from iTunes.

When loading consecutive tracks Amarra will also automatically reload the next tracks when the Playlist is at the end. This feature will load the next 20 tracks and continue playing. Click the button off to disable the auto loading.

6.2.2 Managing Amarra Playlists

There are also menu commands available for adding files from the Finder.



Amarra MINI Playlist commands

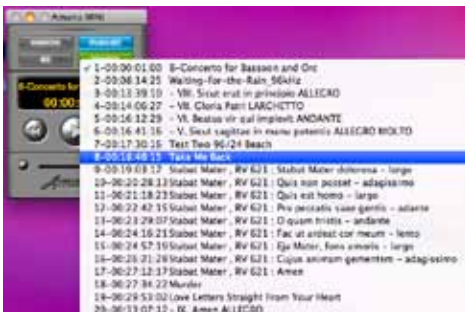
Open Playlist :: Open a previously saved Playlist.

Save Playlist :: Save a Playlist to the Finder.

Open Tracks From iTunes :: Adds a selection of tracks from iTunes.

Open Tracks From Finder :: Add files to a Playlist from Finder.

Clear Playlist :: This command clears all the tracks from the Playlist. With tracks loaded into a Playlist the Tracks button will turn Green and the tracks will be shown in the Tracks Popup Menu. You can select a Track using the popup menu.



Playlist Tracks List

HINT: Install a shortcut for Amarra MINI on your Dock.:

6.3. FLAC Conversion and Playback

Amarra MINI supports conversion routines for FLAC as well as playing back native FLAC directly. Using the FLAC conversion routines under the FILE menu it is possible to convert FLAC files to AIFF and to add them to iTunes automatically.



To play FLAC files specify use the “Open Tracks From Finder” command. The FLAC files will be added to a playlist.

**TIP:**

Save your FLAC Albums as a Playlist for easy playback.

: Convert FLAC File to AIFF

This command Albums a built-in FLAC to AIFF conversion. You will be prompted for the files to convert and for a destination folder to store the converted files. You will also be asked whether you would like to add the files to iTunes after they are converted.

:: Convert FLAC Folder to AIFF

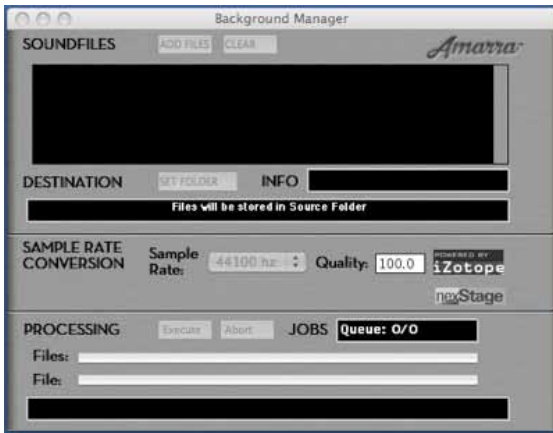
This command provides a built-in FLAC to AIFF conversion. You will be prompted for a folder to convert and for a destination folder to store the converted files. You will also be asked whether you would like to add the files to iTunes after they are converted.

Once you launch a FLAC conversion you can follow its progress using the Amarra Background Manager Window.

6.4. Amarra Background Manager

The Background Manager is used to perform Sample Rate Conversion and monitor the status of FLAC conversion.

Amarra MINI comes with a high quality Sample Rate Conversion. Sample Rate Conversion preserves pitch and duration of the original sound file and will create a new soundfile with the desired sample rate. Amarra MINI supports the ability to convert a file to a variety of sample rates from 44100 - 96000 hz. An additional Quality field is provided as well. A higher quality will take a longer time to process.



There are different areas to this window, each is described below.

:: SOUNDFILES

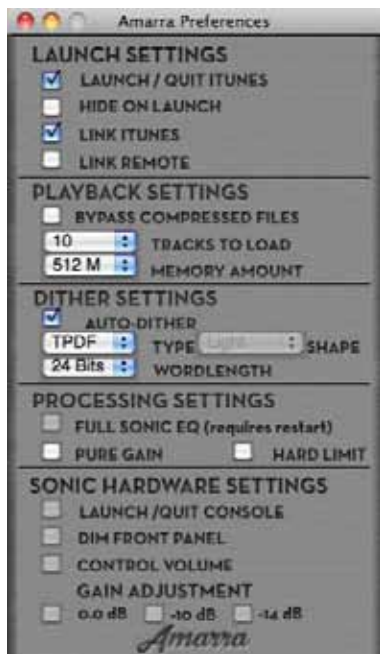
The ADD FILES button can be used to add files to be sample rate converted. You can drag AIFF or WAV files into this window. Information on the file will be displayed in the INFO field. You can set a destination folder or use the default folder which is set to the same folder as the original file.

:: PROCESSING

Once files are added you can start the Sample Rate conversion using the Execute button. The progress will be shown along with the name of the destination file.

6.5. Amarra MINI Preferences

This section presents an overview of the Amarra MINI Preferences.



Amarra MINI provides a built-in Triangular Dither (TPDF) that can be used to adjust the dither processing for audio playback. If Dither is enabled then the output of Amarra will be dithered to the setting of the Output Wordlength specified. This can be useful for providing the a better sound when Gain is used or if your DAC only supports a limited word length (16 or 20 bits).



NOTE:

When the Output Wordlength is set to 24 bits the dither will be “disabled” if the Gain has not been modified (at full volume). Once the Gain is adjusted then dither is re-enabled.



7. Registering Your Amarra MINI Software

In order to receive warranty service, you must register your product with Sonic Studio. This may be done at any time with proof-of-purchase. We strongly recommend that you register with Sonic Studio as soon as you purchase your unit. This will ensure the best possible support for your purchase.

1. Your product will be registered with us.

Registration is used as proof of ownership if your product is ever lost or stolen.

2. Sonic Studio updates Amarra MINI software on a regular basis.

This allows us to keep you informed of updates as they become available.

Please register your Amarra MINI software using our automated registration Web page at:

<http://www.sonicstudio.com/register>

Alternatively, our mail address is:

Amarra Software registration
Sonic Studio, LLC
330 Sir Frances Drake Blvd
Suite A
San Anselmo, CA USA
94960-2552
Phone: +1-415-480-1601
Fax 1-775-330-8923

If you encounter issues using Amarra MINI please refer to the information below for assistance. If none of these steps address your problem please contact your dealer or Sonic Studio support for more help.

7.1 Upgrades to Amarra

The policy for upgrading from Amarra MINI to Amarra is the difference in price. Please contact Sonic Studio or local Amarra representative for ordering information.

6.5. Amarra MINI Preferences

This section presents an overview of the Amarra MINI Preferences.

6.5.1 Launch Settings

Launch/Quit iTunes: When selected, launches and quits iTunes when Amarra Junior launches or quits.

Hide On Launch: When selected, hides Amarra Junior after it launches.

Link iTunes: When selected, links or docks Amarra Junior next to the iTunes window.

Link Remote: When selected, the Amarra Playlist can be used with the Apple Remote (or iTunes) and will automatically follow (as Amarra mode does).

6.5.2 Playback Settings

Bypass Compressed Files: When selected, Amarra MINI skips playing compressed files. This is recommended for older Macs and operating systems.

Tracks To Load: selects the number of track that are loaded when using a Playlist with Add Consecutive Tracks.

Memory Amount: The amount of Random Access Memory or R.A.M. that is allocated for Cache playback.

6.5.3 Dither Settings

Auto-Dither: When selected, automatically enables dither when the volume control of Amarra MINI is reduced.

Amarra MINI provides 2 types of dither that can be used to adjust the dither processing for audio playback. If Dither is enabled, then the output of Amarra will be dithered to the setting of the output wordlength specified. This will generally provide better sound when the volume control in Amarra MINI is used or if your DAC only supports a limited word length (16 or 20 bits for example).



1. Dither Type – Shaped PDF: This radio button selects Sonic Studio's proprietary spectrally shaped, triangular PDF (probability density function) redithering.
2. Dither Type – MBIT+: This radio button selects iZotope's proprietary psychoacoustic MBIT+ redithering.

Word Length: this selector determines the final word length, either 16, 20 or 24 bits. In general, dither should be enabled to ensure linear output when Amarra Junior's volume is reduced.



NOTE:: When the Output Wordlength is set to 24 bits the dither will be "disabled" if the Gain has not been modified (at full volume). Once the Gain is adjusted then dither is re-enabled.

For more information on dither, visit:

http://en.wikipedia.org/wiki/Dither#Digital_audio

6.5.4 Processing Settings

Full Sonic EQ: This feature is disabled in Amarra Junior.

Pure Gain: "Pure Gain" is a preference for calculating gain coefficients when using the volume control. This refers to how Amarra MINI handles Gain Settings.

- "Pure Gain" uses an algorithm which is more efficient.
- It also means some gain values will not be exactly what is typed. For example -6.0 would really be -6.00133

Hard Limit: Hard Limit refers to how gain is processed. It's most useful for compressed music.

- This has to do with how the floating point values are handled after decoding.
- The maximum 24 bit value is really 0.99999989
- In Core Audio the maximum floating point value is 1.0
- Values in between this can cause distortion.
- This preference can improve the sound of compressed files.

8. Troubleshooting Guide

Basic Macintosh Setup Tips

iTunes:

- Disable the Crossfade Songs preference in iTunes
- Disable the Sound Enhancer preference in iTunes
- Disable the Sound Check preference in iTunes

Energy Preferences:

- Disable Sleep and other Energy saving Preferences.

Security:

- Disable Infrared

Spotlight:

- Disable Spotlight

TimeMachine:

- Disable TimeMachine on your media drives.

Folder Actions:

- Disable All Folder Actions
- We recommend a fresh install of the operating on a clean disc.
- We also highly recommend that your computer be used exclusively for music playback, and that all unnecessary devices be disabled.
- Email, web browsers, screen sharing and other applications can effect performance.

See below for answers to common issues.

Issue: Amarra can not find iLOK.

Amarra MINI does not find an iLOK, or finds an iLOK without a valid Amarra license.



Solution:

- Insert an iLOK with a valid Amarra license on it.
- Make sure the iLOK extension for Amarra is installed.
- Please refer the Amarra Startup Guide for more information.

Issue: Amarra MINI operates in demo mode.

Solution:

- Amarra MINI requires a license to operate

Issue: How to set up a remote volume

Amarra does not support streaming of remote songs.
Amarra requires that all volumes be mounted on the computer as a shared volume.

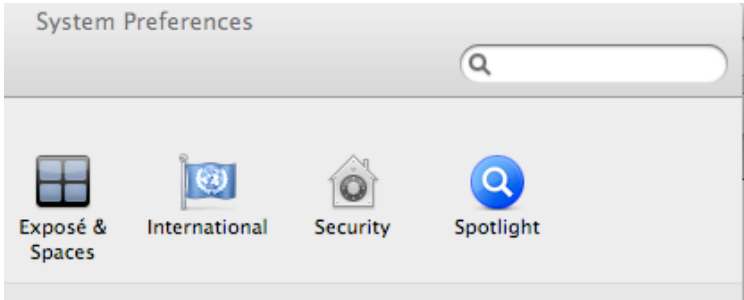
Solution:

- Mount the remote volume with Read/Write Access on your local Macintosh - Use the Network (Cmd-K) to locate and mount the remote volume
- In iTunes used the Add to Library command to add the songs from the Mounted Volume
- Mount the remote volume with Read/Write Access on your local Macintosh

Issue: Audio Clicking or Ticking Sound.

Solution (3 parts):

- Disable Spotlight (add volumes to the Spotlight Privacy Preference)
1) Open System Preferences and locate the Spotlight Preference

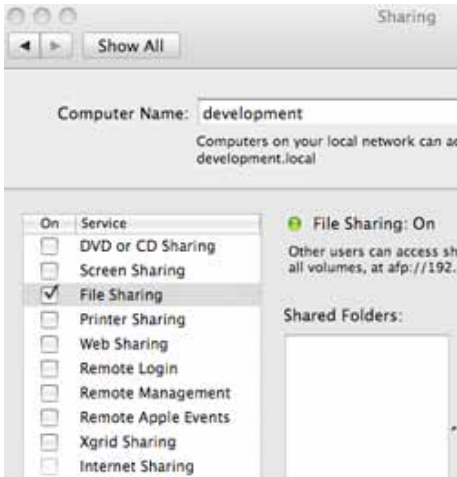


- 2) Select the Privacy Tab and add all your media drives



Solution:

- Disable Network Shared Access.
 - 1) Open System Preferences and locate the Sharing Preference
 - 2) Disable Web Sharing, Remote Login and Remote Management. Please note for support the Remote Management preference may be required.

**Solution:**

- Disconnect multiple FireWire devices and reduce daisy-chained connections.

Solution:

- Shut down other applications such as email and browsers.

Solution:

- Increase the amount of RAM in your computer.

Solution:

- Check that all drives are HFS formatted.
Amarra does not support FAT32 drives.

Solution:

- Change the Sample Rate manually using Audio Midi Setup to a different value.

Then switch the Sample Rate back.

Issue: Songs do not change or sound correctly.

Solution:

- Disable the Crossfade Songs preference in iTunes
- Disable the Sound Enhancer preference in iTunes
- Disable the Sound Check preference in iTunes
- Disable Sleep and other Energy Preferences.

Issue: Amarra does not play audio.

Solution:

- Quit Amarra MINI and iTunes and restart Amarra MINI.

NOTE: Sound files with names that contain ":" or other foreign characters may not play properly. Changing the name of the soundfile can fix this.

Issue: Amarra does not play audio.

Amarra MINI requires an input clock under Audio Midi Setup. If your device does not have an input when shown under AMS then please follow the instructions and create an Aggregate Device.

Solution:

- Create an Aggregate Device under Audio Midi Setup. Please refer to the Aggregate Device Setup in the Documentation Folder.

Issue: Sample Rate Does Not Change With Soundfile.

Does your device support the sample rates for your music? Amarra will only use the available rates on the device. Otherwise, iTunes will be used (and sample rate conversion will occur).

9. Support

We are committed to your successful use of Amarra and offer support for Amarra MINI through your local dealer or via email through Sonic Studio. Please also ask your local dealer for assistance. They have a great deal of knowledge about Amarra MINI and are an excellent resource.

Amarra Team Contact Info:

Please email support with questions.

Please send email to: support@sonicstudio.com

You can always find the latest information and updates for Amarra MINI on our website:

<http://www.amarraaudio.com>

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AmarraMiniUserGuidev2v1

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